SONY

CD Radio Cassette-Corder

Operating Instructions

CFD-S350

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Printed in China

2-548-053-64 (1)

English

WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To reduce the risk of fire, do not cover the ventilation of the apparatus with newspapers, tablecloths, curtains, etc. And do not place lighted candles on the apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.

As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

The player is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the player itself has been turned off.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

Do not expose the batteries (battery pack or batteries installed) to excessive heat such as sunshine, fire or the like for a long time.

The nameplate and important information concerning safety are located on the bottom exterior.

CAUTION

The use of optical instruments with this product will increase eye hazard.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

— Reorient or relocate the receiving antenna.
— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
— Consult the dealer or an experienced radio/TV technician for help.

This class B digital device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

http://www.sony.net/

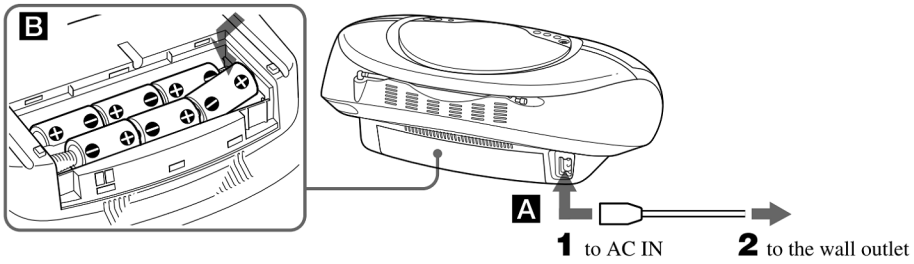
Owner's Record

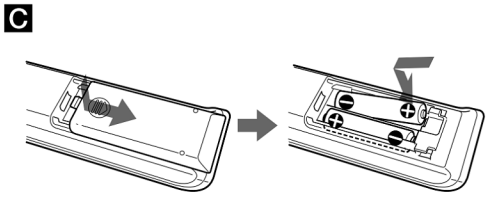
The model number is located at the bottom and the serial number is located in the battery compartment.
Record these numbers in the spaces provided below. Refer to them whenever you call upon your Sony dealer regarding this product.
Model No. CFD-S350
Serial No. _____

For customers in the USA

Please register this product on line at **http://www.sony.com/productregistration**. Proper registration will enable us to send you periodic mailings about new product, services and other important announcements. Registering your product will also allow us to contact you in the unlikely event that the product needs adjustment or modification. Thank you.

Power Sources





Connect the AC power cord A or insert six size D (R20) batteries (not supplied) into the battery compartment B .

Notes

- Replace the batteries when the OPR/BATT indicator dims or when the player stops operating. Replace all the batteries with new ones. Before you replace the batteries, be sure to take out the CD from the player.
- To use the player on batteries, disconnect the AC power cord from the player.
- When you operate the player on batteries, you cannot turn on the player using the remote.

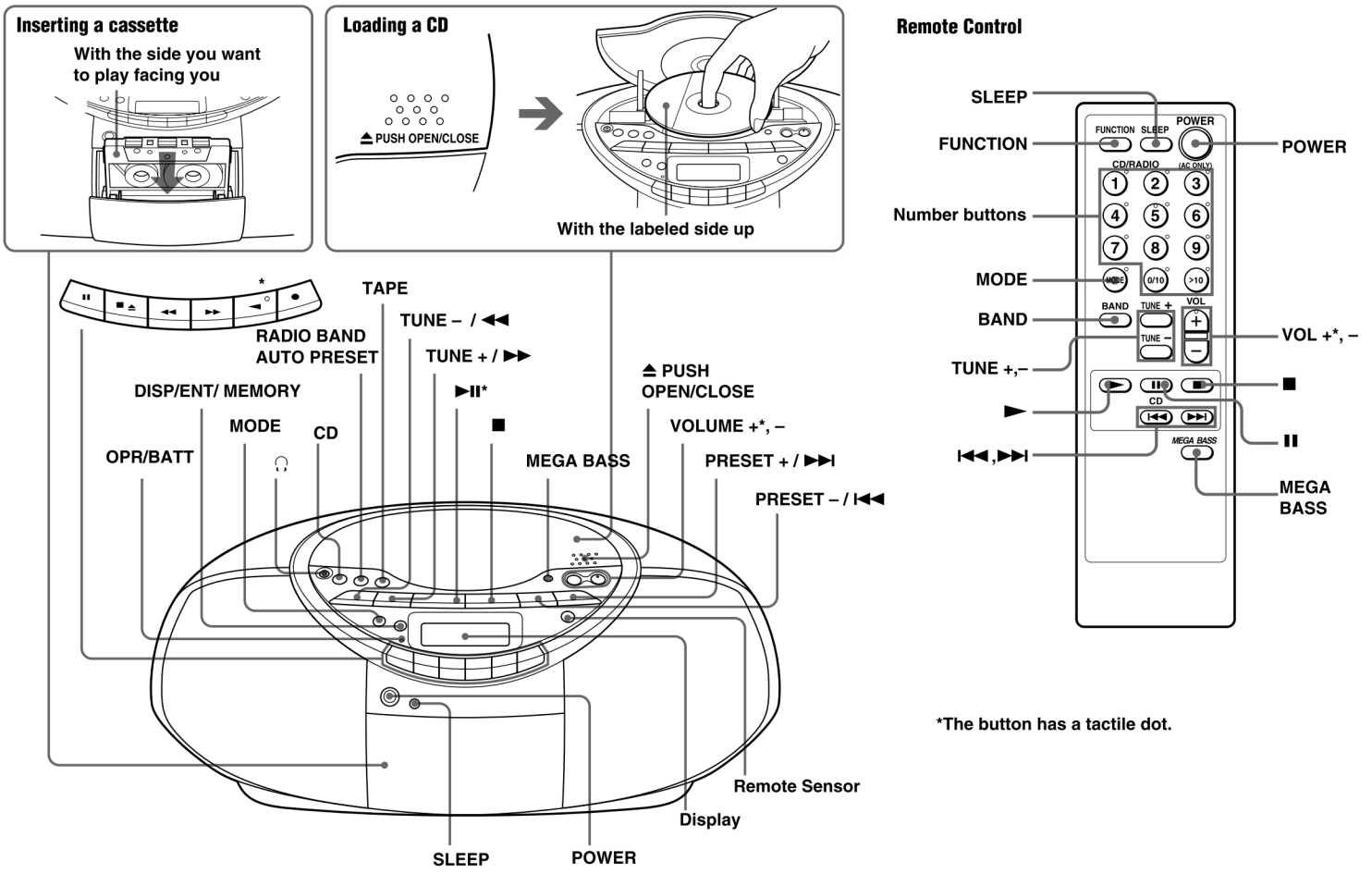
Preparing the remote C

Insert two size AAA (R03) batteries (not supplied).

Replacing batteries

With normal use, the batteries should last for about six months. When the remote no longer operates the player, replace all the batteries with new ones.

Location of controls



To turn on/off the power
Press POWER.

To adjust the volume
Press VOLUME +, – (VOL +, – on the remote).

To listen through headphones
Connect the headphones to the ∩ (headphones) jack.

Adjusting the sound emphasis

To reinforce the bass sound
Press MEGA BASS.

"MEGA BASS" appears in the display.

To return to normal sound, press the button again.

Falling asleep to music

1 Play the music source you want.
2 Press SLEEP to display "SLEEP."
3 Press SLEEP to select the minutes until the player goes off automatically.
Each time you press the button, the indication changes as follows: "60" → "90" → "120" → "OFF" → "10" → "20" → "30".

To cancel the sleep function
Press POWER to turn off the power.

Note
When you are playing a tape using this function:

If the tape length of one side is longer than the set time, the player will not go off until the tape reaches the end.

Playing a CD

1 Press CD (direct power-on).

(On the remote, press POWER and then press FUNCTION repeatedly until "Cd" appears in the display.)

2 Load a CD in the CD compartment.

3 Press ⏏ PUSH OPEN/CLOSE to close the CD compartment.

4 Press ▶II (► on the remote).
The player plays all the tracks once.

To	Press
stop playback	■
pause playback	▶II (II on the remote) Press the button again to resume play after pause.
go to the next track	▶▶I
go back to the previous track	I◀◀
remove the CD	⏏ PUSH OPEN/CLOSE
locate a point while listening to the sound	▶▶ (forward) or ◀◀ (backward) while playing until you find the point (▶▶I or I◀◀ on the remote)
locate a point while observing the display	▶▶ (forward) or ◀◀ (backward) in pause until you find the point (▶▶I or I◀◀ on the remote)
locate a specific track directly*	a number button of the track on the remote

* You cannot locate a specific track if "SHUF" or "PGM" is lit in the display. Turn off the indication by pressing ■.

Tip

To locate a track numbered over 10, press >10 first, then the corresponding number buttons on the remote.
Example:To play track number 23, press >10 first, then 2 and 3.

Using the display

To check the total track number and playing time

Press DISP/ENT/MEMORY in stop mode (see fig. D).

To check the remaining time

Press DISP/ENT/MEMORY repeatedly while playing a CD. The display changes as follows:

→ the current track number and playing time
↓
the current track number and the remaining time on the current track*
↓
the number of tracks left and remaining time on the CD

* For a track whose number is more than 20, the remaining time appears as "- -:- -" in the display.

Selecting the play mode

Press MODE until "REP 1" "REP ALL" "SHUF" "SHUF REP" "PGM" "PGM REP" appears in the display. Then proceed as follows:

To	Select	Then do this
repeat a single track	"REP 1"	Press I◀◀ or ▶▶I to select the track that you want to repeat, then press ▶II.
repeat all the track	"REP ALL"	Press ▶II.
shuffle play	"SHUF"	Press ▶II.
repeat tracks in random order	"SHUF REP"	Press ▶II.
program play	"PGM"	Press I◀◀ or ▶▶I then press DISP/ENT/MEMORY for the tracks you want to program in the order you want up to 20 tracks (see fig. E). Then press ▶II.
repeat programmed tracks	"PGM REP"	Press I◀◀ or ▶▶I then press DISP/ENT/MEMORY for the tracks you want to program in the order you want up to 20 tracks. Then Press ▶II.

On the remote

When you've selected "PGM" or "PGM REP", press the number buttons for the track you want up to 20 tracks, then press ►.

To cancel selected play mode

Press MODE repeatedly until the selected mode disappears from the display.

To check the programmed track and playing order in the display

To check the order of tracks before play, press DISP/ENT/MEMORY.

Every time you press the button, the track number appears in the programmed order.

To change the current program

Press ■ once if the CD is stopped and twice if the CD is playing. The current program will be erased. Then create a new program following the programming procedure.

Tips

- You can play the same program again, since the program is saved until you open the CD compartment.
- You can record your own program. After you've created the program, insert a blank tape and press ● to start recording.

Listening to the radio

1 Press RADIO BAND•AUTO PRESET until the band you want appears in the display (direct power-on).
Each time you press the button, the indication changes as follows:
"FM" → "AM".

2 Hold down TUNE + or – until the frequency digits begin to change in the display.

The player automatically scans the radio frequencies and stops when it finds a clear station.
If you can't tune in a station, press the button repeatedly to change the frequency step by step.

Tip

If the FM broadcast is noisy, press MODE repeatedly until "Mono" appears in the display and the radio will play in monaural.

Presetting radio stations

You can store radio stations into the player's memory. You can preset up to 30 radio stations , 20 for FM and 10 for AM in any order.

1 Press RADIO BAND•AUTO PRESET to select the band.

2 Hold down RADIO BAND•AUTO PRESET for 2 seconds until "AUTO" flashes in the display.

3 Press DISP/ENT/MEMORY.
The stations are stored in memory from the lower frequencies to the higher ones.

If a station cannot be preset automatically

You need to preset a station with a weak signal manually.

1 Press RADIO BAND•AUTO PRESET to select the band.
2 Tune in a station you want.
3 Hold down DISP/ENT/MEMORY for 2 seconds until the preset number flashes in the display.
4 Press PRESET + or – until the preset number you want for the station flashes in the display.
5 Press DISP/ENT/MEMORY.
The new station replaces the old one.

On the remote

1 Press BAND until the band you want appears in the display.
2 Tune in a station you want.
3 Hold down the number buttons that you want to preset the new station on for about 2 seconds.
To select the preset number over 10, press >10 first, then the corresponding number buttons. You need to hold down the last number button to enter for about 2 seconds.
(Example: To select 12, press >10 and 1 first, then hold down 2 for about 2 seconds.)

Tip

The preset radio stations remain in memory even if you unplug the AC power cord or remove the batteries.

Playing preset radio stations

1 Press RADIO BAND•AUTO PRESET to select the band.

2 Press PRESET + or – to tune in the stored station.

On the remote

1 Press BAND.
2 Press the number buttons to tune in the stored station.
To tune in a preset station over 10, press >10 first, then corresponding number buttons.
(Example: To tune in a preset station 12, press >10 and 1 first, and then press 2.)

Playing a tape

1 Press TAPE (direct power-on).

(On the remote, press POWER and then press FUNCTION repeatedly until "TAPE" appears in the display.)

2 Press ■⏏ to open the tape compartment and insert a recorded tape. Close the compartment. Use TYPE I (normal) tape only.

3 Press ◄.

To	Press
stop playback	■⏏
fast-forward or rewind the tape	►► or ◄◄
pause playback	❚❚ Press the button again to resume play after pause.
eject the cassette	■⏏

Recording

1 Press ■⏏ to open the tape compartment and insert a blank tape. Use TYPE I (normal) tape only.

2 Select the program source you want to record.

To record from the CD player

Press CD and insert a CD (See “Playing a CD”).

To record from the radio

Press RADIO BAND•AUTO PRESET and tune in the station you want (See “Listening to the radio”).

3 Press ● to start recording.
(◄ is depressed automatically.)

To	Press
stop recording	■⏏
pause recording	❚❚ Press the button again to resume recording.

Tips

- Adjusting the volume or the audio emphasis will not affect the recording level.
- For the best results, use the AC power as a power source for recording.
- To erase a recording, proceed as follows:
  1 Insert a tape with the recording you want to erase.
  2 Press TAPE.
  3 Press ●.

Precautions

On safety

- As the laser beam used in the CD player section is harmful to the eyes, do not attempt to disassemble the casing. Refer servicing to qualified personnel only.
- Should any solid object or liquid fall into the player, unplug the player, and have it checked by qualified personnel before operating it any further.
- Discs with non-standard shapes (e.g., heart, square, star) cannot be played on this player. Attempting to do so may damage the player. Do not use such discs.

Cleaning the cabinet

- Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as alcohol or benzine.

On power sources

- For AC operation, use the supplied AC power cord; do not use any other type.
- Unplug the player from the wall outlet when it is not be used for an extended period of time.
- For battery operation, use six size D (R20) batteries.
- When the batteries are not to be used, remove them to avoid damage that can be caused by battery leakage or corrosion.

On placement

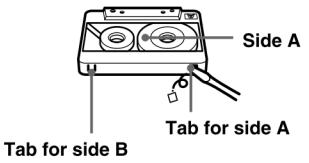
- Do not leave the player in a location near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.
- Do not place the player on an inclined or unstable place.
- Do not place anything within 10 mm of the side of the cabinet. The ventilation holes must be unobstructed for the player to operate properly and prolong the life of its components.
- If the player is left in a car parked in the sun, be sure to choose a location in the car where the player will not be subjected to the direct rays of the sun.
- Since a strong magnet is used for the speakers, keep personal credit cards using magnetic coding or spring-wound watches away from the player to prevent possible damage from the magnet.

On operation

- If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the CD player section. Should this occur, the player will not operate properly. In this case, remove the CD and wait about an hour for the moisture to evaporate.
- If the player has not been used for a long time, set it in the playback mode to warm it up for a few minutes before inserting a cassette.

Notes on cassettes

- Break off the cassette tab from side A or B to prevent accidental recording. If you want to reuse the tape for recording, cover the broken tab with adhesive tape.



- The use of a cassette with more than 90 minutes of play time is not recommended except for long, continuous recording or playback.

Notes on CDs

- Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out.

- Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in temperature inside the car.
- Do not stick paper or sticker on the CD, nor scratch the surface of the CD.
- After playing, store the CD in its case.

If there is a scratch, dirt or fingerprints on the CD, it may cause tracking error.

About CD-Rs/CD-RWs

This player can play CD-Rs/CD-RWs recorded in the CD-DA format*, but playback capability may vary depending on the quality of the disc and the condition of the recording device.

* CD-DA is the abbreviation for Compact Disc Digital Audio. It is a recording standard used for Audio CDs.

Music discs encoded with copyright protection technologies

This product is designed to play back discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

Note on DualDisc

A DualDisc is a two sided disc product which mates DVD recorded material on one side with digital audio material on the other side. However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on this product is not guaranteed.

If you have any questions or problems concerning your player, please consult your nearest Sony dealer.

Troubleshooting

General

The power does not come on.

- Make sure the batteries are inserted correctly.
- Replace all the batteries with new ones if they are weak.
- You cannot turn on the player with the remote when you operate the player on batteries .

The power is not on, and "bAttErY" and “Error” are displayed alternately.

- Make sure the batteries are inserted correctly.
- Replace all the batteries with new ones if they are weak.

There is no audio.

- Adjust the volume.
- Unplug the headphones when listening through speakers.

Noise is heard.

- Someone is using a portable telephone or other equipment that emits radio waves near the player. →Move the portable telephone, etc., away from the player.

CD Player

The CD does not play or “no dISC” lights in the display even when a CD is in place.

- Place the CD with the label surface up.
- Clean the CD.
- Take out the CD and leave the CD compartment open for about an hour to dry moisture condensation.
- The CD-R/CD-RW was not finalized. Finalize the CD-R/CD-RW with the recording device.
- There is a problem with the quality of the CD-R/CD-RW, recording device, or application software.
- The CD-R/CD-RW is blank.
- Replace all the batteries with new ones if they are weak.

The sound drops out.

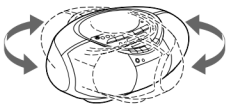
- Reduce the volume.
- Clean the CD, or replace it if the CD is badly damaged.
- Place the player in a location free from vibration.
- Clean the lens with a commercially available blower.
- The sound may drop out or noise may be heard when using poor quality CD-Rs/CD-RWs or if there is a problem with the recording device or application software.

Radio

Reception is poor.

- Reorient the antenna to improve FM reception.

- Reorient the player itself to improve AM reception.



The audio is weak or has poor quality.

- Replace all the batteries with new ones if they are weak.
- Move the player away from the TV.

The picture of your TV becomes unstable.

- If you are listening to an FM program near the TV with an indoor antenna, move the player away from the TV.

Tape Player

The tape does not move when you press an operation button.

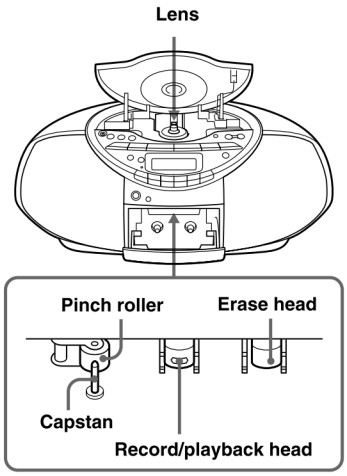
- Close the cassette compartment securely.

The ● button does not function or the tape does not play or record.

- Make sure the safety tab on the cassette is in place.

Poor or distorted playback, recording or erasing quality.

- Clean the heads, pinch roller and capstan with a cleaning swab slightly moistened with cleaning fluid or alcohol.
- Replace all the batteries with new ones if they are weak.
- TYPE II (high position) or TYPE IV (metal) tape is being used. Use TYPE I (normal) tape only.
- Demagnetize the heads using a commercially available tape head demagnetizer.



Remote

The remote does not function.

- Replace all the batteries in the remote with new ones if they are weak.
- Make sure that you are pointing the remote at the remote sensor on the player.
- Remove any obstacles in the path of the remote and the player.
- Make sure the remote sensor is not exposed to strong light such as direct sunlight or fluorescent lamp light.
- Move closer to the player when using the remote.

After trying the above remedies, if you still have problems, unplug the AC power cord and remove all the batteries. After all the indications in the display disappear, plug the power cord and insert the batteries again. If the problem persists, please consult your nearest Sony dealer.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 3.2-ohm loads, both channels driven from 150 - 6,300 Hz; rated 1.8 W per channel-minimum RMS power, with no more than 10 % total harmonic distortion in AC operation.

Other specifications

CD player section

System
- Compact disc digital audio system

Laser diode properties
- Material: GaAlAs
- Wave length: 780 nm
- Emission duration: Continuous
- Laser output: Less than 44.6 µW
- (This output is the value measured at a distance of about 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)

Spindle speed
- 200 r/min (rpm) to 500 r/min (rpm) (CLV)

Number of channels
- 2

Frequency response
- 20 - 20 000 Hz +1/–2 dB

Wow and flutter
- Below measurable limit

Radio section

Frequency range
- FM: 87.5 - 108 MHz
- AM: Taiwan model: 531 - 1 611 kHz
- Other models: 530 - 1 710 kHz

Antennas
- FM: Telescopic antenna
- AM: Built-in ferrite bar antenna

Cassette-corder section

Recording system
- 4-track 2 channel stereo

Fast winding time
- Approx. 120 s (sec.) with Sony cassette C-60

Frequency response
- TYPE I (normal): 80 - 10 000 Hz

General

Speaker
- Full range: 10 cm dia., 3.2 ohms, cone type (2)

Outputs
- Headphones jack (stereo minijack)
- For 16 - 68 ohms impedance headphones

Power output
- 2.3 W + 2.3 W (at 3,2 ohms, 10% harmonic distortion)

Power requirements
- For CD radio cassette-corder:
- 120 V AC, 60Hz
- 9 V DC, 6 size D (R20) batteries
- For remote control:
- 3 V DC, 2 size AAA (R03) batteries

Power consumption
- AC 14 W

Battery life
- For CD radio cassette-corder:

FM recording
Sony R20P: approx. 13.5 h
Sony alkaline LR20: approx. 20 h
Tape playback
Sony R20P: approx. 7.5 h
Sony alkaline LR20: approx. 15 h
CD playback
Sony R20P: approx. 2.5 h
Sony alkaline LR20: approx. 7 h

Dimensions
- Approx. 420 × 155 × 260 mm (w/h/d)
- (16 ⅝ × 6 ⅛ × 10 ¼ inches) (incl. projecting parts)

Mass
- Approx. 3,7 kg (8 lb. 3 oz) (incl. batteries)

Supplied accessory
- AC power cord (1)
- Remote control (1)

Design and specifications are subject to change without notice.

Optional accessories

Sony MDR headphone series

SONY®

Portable Audio

LIMITED WARRANTY (U.S. Only)

Sony Electronics Inc. (“Sony”) warrants this product against defects in material or workmanship for the time periods and as set forth below when purchased directly from Sony or a Sony Retailer. Pursuant to this Limited Warranty, Sony will, at its option, (i) repair the product using new or refurbished parts or (ii) replace the product with a new or refurbished product. For purposes of this Limited Warranty, “refurbished” means a product or part that has been returned to its original specifications. **In the event of a defect, these are your exclusive remedies.**

Labor: For a period of ninety (90) days from the original date of purchase of the product (“Labor Warranty”), Sony will, at its option, repair or replace with new or refurbished product, product determined to be defective. If Sony elects to replace the product after this Labor Warranty has expired but while the Parts Warranty below is still in effect, it will do so for the applicable labor charge.

Parts: For a period of one (1) year from the original date of purchase of product (“Parts Warranty”), Sony will supply new or refurbished replacement parts in exchange for parts determined to be defective.

This Limited Warranty covers only the hardware components packaged with the Product. It does not cover technical assistance for hardware or software usage and it does not cover any software products whether or not contained in the Product; any such software is provided “AS IS” unless expressly provided for in any enclosed software Limited Warranty. Please refer to the End User License Agreements included with the Product for your rights and obligations with respect to the software.

Instructions: To obtain warranty service, you must deliver the product, freight prepaid, in either its original packaging or packaging affording an equal degree of protection to the Sony authorized service facility specified. **It is your responsibility to backup any data, software or other materials you may have stored or preserved on your unit. It is likely that such data, software, or other materials will be lost or reformatted during service and Sony will not be responsible for any such damage or loss.** A dated purchase receipt from Sony or a Sony Retailer is required. For specific instructions on how to obtain warranty service for your product,

Visit Sony’s Web Site:
www.sony.com/support

Or call the **Sony Customer Information Service Center**
1-800-222-SONY (7669)

For an accessory or part not available from your authorized dealer, call:

1-800-488-SONY (7669)

Repair / Replacement Warranty: This Limited Warranty shall apply to any repair, replacement part or replacement product for the remainder of the original Limited Warranty period or for ninety (90) days, whichever is longer. Any parts or product replaced under this Limited Warranty will become the property of Sony.

This Limited Warranty only covers product issues caused by defects in material or workmanship during ordinary consumer use; it does not cover product issues caused by any other reason, including but not limited to product issues due to commercial use, acts of God, misuse, limitations of technology, or modification of or to any part of the Sony product or product purchased from other than Sony or a Sony Retailer. To determine if a retailer is part of the Sony Retailer Network, please contact Sony’s Customer Service Call Center or go to www.sony.com/support. This Limited Warranty does not cover Sony products sold AS IS or WITH ALL FAULTS or consumables (such as fuses or batteries). This Limited Warranty is invalid if the factory-applied serial number has been altered or removed from the product. This Limited Warranty is valid only in the United States.

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